

# Electrical Installation Code

## Taiwan

- ◆ The Indoor Electric Wiring Code (IEWC) regulates the installation of electric wiring and electric facilities in buildings in Taiwan ROC. The Outdoor Electric Lines Installation Code (OELIC) regulates the installation of the electric wiring system connecting the power lines between the supplier and the user.
- ◆ The IEWC was last revised in 14 April 1999.
- ◆ The Ministry of Economic Affairs (MOEA) is the concerned authority with regard to IEWC. The Energy Commission of the MOEA is responsible for matters concerning the revision of articles and the clarification of regulations contained in the IEWC.
- ◆ The Key contact Person is Mr. Chen-Chang Lee, Project engineer of the aforementioned Energy Commission of the MOEA. Telephone number is 886-2-27757756. E-mail address is [cclee@moeaec.gov.tw](mailto:cclee@moeaec.gov.tw).
- ◆ Prior to the implementation of the IEWC on 18 August 1952, the power system of Taiwan was similar to that of Japan. In order to conform to the production or improvement of the latest power facilities, material, technology, and operational procedures, the IEWC has undergone 12 revisions. The National Electric Code (NEC) of the US and the Japanese Electric Association Code (JEAC/JEA) of Japan serve as the main source documents of these revisions.
- ◆ There is currently only one power system in Taiwan, the transmission and distribution of which is the responsibility of the government-controlled Taiwan Power Company (TaiPower). Hence, the IEWC applies to all electric installations in buildings all over Taiwan. Moving transportation facilities are not covered under the IEWC.
- ◆ There is currently no alternative code to the IEWC. However, some super high voltage electrical installations require reference to OELIC regulations.
- ◆ As mentioned, the IEWC regulates the power system at the user end; while the OELIC regulates that of the supplier end. In other words, public and private buildings, including those that are industrial, commercial, and residential, observe regulations stipulated under the IEWC. Unless they are specially installed facilities, power suppliers, including generation plants and substations, in principle need to comply with IEWC regulations. The wiring system for the transmission or distribution of electricity is installed according to OELIC regulations.
- ◆ The IEWC covers all newly constructed buildings and old buildings. However, old

buildings may be maintained according to the existing regulation then prior to the current revised code. When the need to change the design and installation of the wiring systems of old buildings arises, the latest revised regulations are to be complied with. These regulations are mandatory. Inasmuch as the frequent revision of these regulations causes inconvenience for users and manufacturers of electrical facilities. Therefore only if there is an urgent need shall a major revision of the Code be undertaken. There is no fixed time period for revisions.

- ◆ Taiwan is currently promoting the liberalization of electricity market. Once the “Electricity Law” has been modified and legislated, all IEWC regulations shall be revised. Certain regulations also need revision after Taiwan’s entry into the World Trade Organization (WTO).
- ◆ Comments on Code articles are culled by the Energy Commission (MOEA) from concerned government agencies, including the Construction and Planning Administration; the Bureau of Standards, Metrology and Inspection; the Utility (TaiPower); the designing Unions and Associations of architects and electrical engineers; the Electrical Contractors’ Association which is responsible for implementation, construction, and inspection; and the Electrical and Electronic Manufacturers’ Association. After the collected suggestions have been studied to determine their necessity, the aforementioned agencies are called to meeting for discussion and preparation of a draft revision.
- ◆ The draft revision is announced and implemented only after being duly approved by the Ministry of Economic Affairs.
- ◆ Revised regulations are made known to the public through press releases and announcements prepared by the Energy Commission (MOEA). These regulations can also be found in related websites or printed publications to serve as reference for users.
- ◆ The IEWC is an executive order, whose objective is to ensure the safety of the use of electricity. Inasmuch as this concerns the restriction of rights, everything is done according to Electricity Law regulations. The IEWC goes through a uniform legal procedure and takes effect only after examination and approval by concerned authorities as stipulated in the Electricity Law.
- ◆ Based on Taiwan regulations, the Taiwan Power Company (Utility) is responsible for building inspections to check whether the design and installation of power facilities and electrical wiring are in compliance with regulations.
- ◆ An approval to start construction of a building shall be issued by the concerned authority with regard to constructions only after the electrical wiring design has been reviewed and approved by the Utility (TaiPower). A seal certifying the approval is stamped on the design. After the completion of construction, the

Utility (TaiPower) checks the completed construction to ensure that everything has been done according to the design. Power is made available only after these requirements have been satisfied.

- ◆ The Energy Commission is responsible for providing explanations in the event that there are doubts regarding the regulations. Concerned members of agencies or institutions are called to meet for discussion, if necessary. Results of the meeting are submitted to the Ministry of Economic Affairs for review and approval and are announced to resolve any existing arguments.
- ◆ No power is supplied to newly constructed buildings that do not comply with IEWC regulations. A grace period is granted once violations are committed in the maintenance of old buildings. Power is cut off if conditions are not ameliorated within the time limit provided.
- ◆ In coordination with Taiwan's promotion of liberalization of the electricity market and its entry into the World Trade Organization (WTO), the Energy Commission is preparing to undertake research projects to study the scope of revision that the IEWC needs and its possible effects. A national code is envisioned based on the standards of the International Electrotechnical Commission and with reference to the current power system structure. This would hopefully enhance the level of Taiwan's electrical engineering standards and narrow the gap between Taiwan and the rest of the world in order to promote industrial and commercial exchanges.